

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 January 2005 (06.01.2005)

PCT

(10) International Publication Number
WO 2005/000735 A3

(51) International Patent Classification⁷: **H01L 29/76**,
29/94, 31/062

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(21) International Application Number:
PCT/US2003/037186

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(22) International Filing Date:
19 November 2003 (19.11.2003)

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR,
CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU,
SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/427,616 19 November 2002 (19.11.2002) US

(84) Designated States (*regional*): ARIPO patent (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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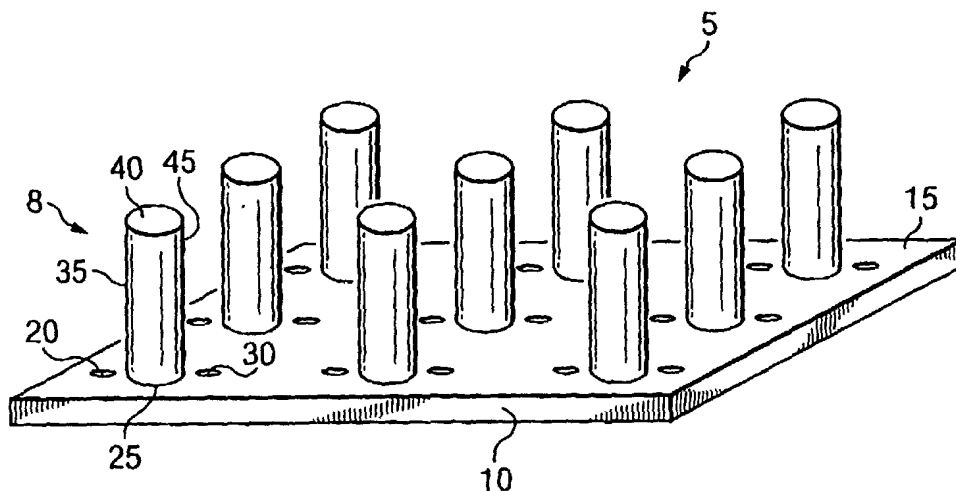
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Published:
— with international search report

[Continued on next page]

(54) Title: METHOD FOR CREATING A FUNCTIONAL INTERFACE BETWEEN A NANOPARTICLE, NANOTUBE OR
NANOWIRE, AND A BIOLOGICAL MOLECULE OR SYSTEM



(57) Abstract: A field effect transistor and a method for making the same. In one embodiment, the field effect transistor comprises a source; a drain; a gate; at least one carbon nanotube on the gate; and a dielectric layer that coats the gate and a portion of the at least one carbon nanotube, wherein the at least one carbon nanotube has an exposed portion that is not coated with the dielectric layer, and wherein the exposed portion is functionalized with at least one indicator molecule. In other embodiments, the field effect transistor is a biochem-FET

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(88) Date of publication of the international search report:

28 April 2005

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/37186

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H01L 29/76,29/94,31/062

US CL : 257/288,E51.038,E51.04; 977/DIG/1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 257/288,E51.038,E51.04; 977/DIG/1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST, NATURE, SCIENCE, search terms: nanotube, nanowire, DNA, sensor, and/or functionalization

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2002/0117669 A1 (LIEBER et al.) 29 August 2002 (29.08.2002), see entire document.	1-36
A	US 2002/0130333 A1 (WATANABE et al.) 19 September 2002 (19.09.2002), Figs. 1-11.	1-36
A	KONG et al., Nanotube Molecular wires as Chemical Sensors, Science, 28 January 2000, Vo. 287, pages 622-625, Figs. 1-3	1-36

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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"&"

document member of the same patent family

Date of the actual completion of the international search

08 February 2005 (08.02.2005)

Date of mailing of the international search report

01 MAR 2005

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner of Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

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